

Andreas Braun

Chief Medical Officer, Sequenom, Inc., USA

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Dr. Braun serves as the Chief Medical Officer at Sequenom, Inc., a highly competitive industrial genomics company headquartered in San Diego, CA. He has served in this capacity since September 1999, when he was promoted from the role of Vice President, Genomics. Previously, Dr. Braun joined Sequenom GmbH, a fully owned subsidiary of Sequenom, Inc., to serve as Director of Laboratory Research in 1995. He served as Deputy Head of the Clinical Laboratory at the Children's Hospital, University of Munich from 1992. In addition to his more than 45 peer-reviewed scientific publications, Dr. Braun holds doctorate degrees in both Biology and Medicine from the University of Munich. His research focus at the University of Munich included human sex determination, population genetics of human plasma proteins, human neuro-degenerative diseases, and functional analysis of various alleles of the human bradykinin ß2 receptor. In 1996 he was honored by the German Society of Clinical Chemistry with the Garbor-Szasz Award for outstanding achievement in molecular medicine. Additional research work in functional pharmacogenomics includes the design and introduction of highly accurate molecular tests in routine medical diagnostics and quality assurance of DNA analysis in medicine. Within the past 5 years Dr. Braun has successfully lead the development of Sequenom's premier technology DNA MassArrayTM, which is now used commercially. In addition, he has developed a novel scientific concept to validate human genetic diversity with regard to its clinical importance.

CONTACT INFORMATION

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From SNPs to Medical Utility

The completion and availability of the entire human genome sequence is enabling for the discovery of genes and gene products involved in human complex disorders. The successful identification of these genes is dependent on available sample sets, a high-throughput scoring technology, and an underlying scientific hypothesis on how to use the samples and the technology. Sequenom has developed a chip-based mass spectrometry approach for the analysis of single nucleotide polymorphisms (SNPs) the most abundant genetic variations, which is complemented by a fully automated SNP assay development procedure and the rapid assessment of allele frequencies in sample pools. This allows the cost effective testing of virtually all gene-based genetic variations and the association of the results with a variety of different phenotypes. We are currently developing the world's most comprehensive set of reagents to test for SNPs. A scientific strategy using this reagent set for elucidating the major genetic factors involved in human diseases will be presented.